September 20, 2017

VIA ELECTRONIC DELIVERY

Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

Re: Thirteenth Broadband Progress Notice of Inquiry, GN Docket No. 17-199

Dear Ms. Dortch:

The Satellite Industry Association (SIA)[1] submits these comments in the Thirteenth Broadband Progress Notice of Inquiry (NOI)[2] to urge the Federal Communications Commission (Commission), as it releases its 706 Broadband Progress Report, to recognize the significant investments satellite providers have made—and continue to make—to expand the availability of advanced telecommunications capability that meet or exceed the Commission's benchmark.[3] As SIA explains herein, satellite capacity is an important part of the competitive consumer broadband landscape and the Commission should consider the benefits

[1] SIA Executive Members include: The Boeing Company; AT&T Services, Inc.; EchoStar Corporation; Intelsat S.A.; Iridium Communications Inc.; Kratos Defense & Security Solutions; Ligado Networks; Lockheed Martin Corporation; Northrop Grumman Corporation; OneWeb; SES Americom, Inc.; Space Exploration Technologies Corp.; SSL; and ViaSat, Inc. SIA Associate Members include: ABS US Corp.; Analytic Graphics Inc.; Artel, LLC; Blue Origin: DigitalGlobe Inc.; DataPath Inc.; DRS Technologies, Inc.; Eutelsat America Corp.; Global Eagle Entertainment; Globecomm; Glowlink Communications Technology, Inc.; Hawkeye360; Hughes; Inmarsat, Inc.; Kymeta Corporation; L-3 Electron Technologies, Inc.; O3b Limited; Panasonic Avionics Corporation; Planet; Semper Fortis Solutions; Spire Global Inc.; TeleCommunication Systems, Inc.; Telesat Canada; TrustComm, Inc.; Ultisat, Inc.; and XTAR, LLC. For more information, visit www.sia.org.

[2] Thirteenth Broadband Progress Notice of Inquiry, GN Docket No. 17-199

[3] Attached as Annex A is the 2016 State of the Satellite Industry Report which provides detailed information on these investments.

of satellite-enabled broadband capacity in a technology neutral manner when evaluating its role in facilitating advanced telecommunications services to the country.

Determining the amount of capacity available to serve consumers is an issue that impacts *all* networks, whether terrestrial or space-based, wireless or wireline, in the same way. Regardless of technology used or whether the service is spectrum or non-spectrum based, each network has a limit or capacity-constraint on the extent it is able to simultaneously serve all potential users at particular levels of service. And, as the user demand for bandwidth grows with new applications and devices, satellite networks, just like terrestrial networks, scale through investments that are the same as those needed to scale terrestrial networks. In many respects, satellite networks can scale more quickly and efficiently than terrestrial networks. Therefore, the issue is not measuring theoretical capacity, but how well a network is managed to minimize congestion and provide a high-quality experience to consumers. In contrast, networks that may be "capacity-rich" (including fiber-to-the-node) can experience significant congestion issues and 'bottlenecks' that can limit the speed and other consumer quality criteria.

Accordingly, to the extent that the Commission utilizes Form 477 data to determine fixed service deployment as a proxy for capacity in a particular area, the same data should be employed to calculate fixed satellite service deployment for determining capacity in a given area. Change of deployment across time as part of the inquiry may be a useful metric, but there could be others as well. The Form 477 is a long-standing approach for determining availability of advanced broadband services. Without an approach that looks at capacity constraints across *all* technologies in the same way, the Commission should continue to utilize the 477 methodology, especially as the satellite industry, like all competitive platforms, continues to build out new infrastructure to meet consumer demands.

This increase in capacity is shown by the recent launch and entry into service of Hughes Network Systems, LLC ("Hughes") high-throughput (HTP) geostationary orbit (GSO) satellite, EchoStar XIX and in the June launch and near-term entry into service of the ViaSat-2 satellite. With these networks entering into service, consumers across the continental United States, as well as in southern Alaska and Puerto Rico have access to additional high-speed broadband satellite services, wherever they live, at speeds of 25/3 Mbps and above, expected up to 100 Mbps for ViaSat-2. In addition, with the recent grant of the OneWeb non-geostationary orbit (NGSO) satellite application and the dozen pending NGSO applications, SIA anticipates that the United States will see a significant increase

in satellite-based capacity over the next few years. This, coupled with planned GSO deployments by Hughes and ViaSat, among others, will bring significant additional ubiquitous capacity and competition to the United States broadband market.

As discussed, the satellite industry is making significant investment in advanced communications. With the additions of EchoStar XIX and ViaSat-2, consumers across the United States are gaining access to higher speeds and greater capacity than previously available by satellite. Accordingly, in assessing the factors that influence the availability of advanced telecommunications capability, the Commission should explicitly recognize in its Section 706 Progress Report the significant investment by the satellite industry that will bring advanced communications services to U.S. consumers and treat satellite broadband communications on a technology neutral basis with other competitive platforms.

Respectfully submitted,

/s/

SATELLITE INDUSTRY ASSOCIATION

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